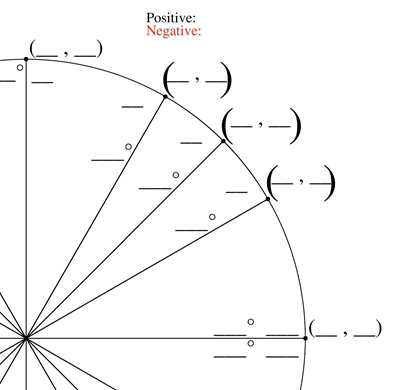
**Homework 54H** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit Circle – Quadrant 1** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Failure to show all work and write in complete sentences will result in LaSalle!

|  |  |
| --- | --- |
| Write the Pythagorean Theorem:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Write the Pythagorean Theorem as applied to the unit circle using x and y:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Write the Pythagorean Theorem as applied to the unit circle using sine and cosine:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| 1.  = 45° (draw a special right triangle for each unit circle)  cos 45° =  sin 45° =  Coordinate = | 2.  = 30°  cos 30° =  sin 30° =  Coordinate = |
| 3.  = 60°  cos 60° =  sin 60° =  Coordinate = | 4.  = 90°  cos 90° =  sin 90° =  Coordinate = |

Fill in the degree measure, radian measure and coordinate for each angle. (Try to remember without your notes!)



|  |  |
| --- | --- |
| 5. Draw a -500° angle.    a. Find one positive angle that is coterminal with the given angle.  b. Find one negative angle that is coterminal with the given angle.  c. Convert -500° to radians. | 6. Draw an angle that measures  radians.    a. Find one positive angle that is coterminal with the given angle.  b. Find one negative angle that is coterminal with the given angle.  c. Convert radians to degrees. |
| 7. What is a radian? Explain the relationship between degrees and radians. | |